



Cold Climate Housing Research Center

CCHRC

PROGRESS REPORT

GRANT NUMBER: 7310026

COLD CLIMATE HEAT PUMP DEMONSTRATION

COLD CLIMATE HOUSING RESEARCH CENTER

10/1/2013 – 12/31/2013

Deliverables Submitted

No deliverables were submitted this quarter.

Budget

Amount Invoiced: \$7,221.91

Most of the budget for this quarter went to the final heat pump and data system installation.

Schedule Status

We are a few months behind schedule due to the tricky nature of construction projects.

Percent Complete

	Start Date	End Date	Percent Complete
Thermal Response Test	Sep-12	Oct-12	100%
Heat pump system design	Nov-12	Mar-13	100%
Update monitoring plan	Nov-12	Mar-13	100%
Ground loop installation	Jun-13	Jul-13	100%
Heat pump installation	May-13	Nov-13	100%
Data acquisition system installation	Jun-13	Dec-13	100%
Commissioning	Sep-13	Jan-14	95%
System monitoring and maintenance Year 1	Sep-13	Sep-14	30%
System monitoring and maintenance Year 2	Sep-14	Sep-15	N/A
System monitoring and maintenance Year 3	Sep-15	Mar-16	N/A
Data analysis, LCCA, and draft report completion	Apr-16	Jun-16	N/A
Final project report	Jul-16	Jul-16	N/A

Work Progress

The final heat pump and data collection installation was completed in December 2103. There are a few changes that need still need to take place in the data collection system in order to complete the system. The heat pump is heating the office section of the building and data is being collected on a regular basis.

Future Work

We will complete the commissioning report in January 2014 now that the system has a month's worth of data we will be able to optimize the system and complete the commissioning. Following the commissioning we will be collecting data and monitoring the system for three years.



The CCHRC heat pump installed.